

CLAIMS

1. An oral dietary supplement acting by synergy between two bioactive component substances called a component 1 and a component 2.
2. Said component 1 may be a substance comprising:
 - a. at least one selected from the group consisting of acetyl-L-carnitine, any acylated ester of L-carnitine having an acyl chain of two to six carbon length, and pharmacological acceptable salts and derivatives thereof and mixtures thereof, and
 - b. a pharmacological appropriate dose over the range of 10 milligrams to 20 grams.
3. Said component 2 may be a substance comprising:
 - a. at least one selected from the group consisting of L-ornithine, L-arginine, L-lysine, L-histidine, L-phenylalanine, L-leucine, L-valine, L-methionine, L-threonine, putrescine, spermidine, and pharmacological acceptable salts and derivatives thereof and mixtures thereof, and
 - b. a pharmacological appropriate dose over the range of 1 milligram to 10 grams.
4. Various pharmacological dosages of the component 1 and the component 2 may be administered by techniques comprising:
 - a. any appropriate physiological formulation including both solid and liquid formulations and mixtures thereof, and
 - b. any physiologically appropriate method of delivery of an oral dietary supplement, and
 - c. separate oral ingestion of the component 1 and the component 2 at approximately the same time, and
 - d. oral ingestion of a mixture of the component 1 and the component 2 as a single formulation.
5. Ingestion of the component 1 and the component 2 must be preceded by a fast of approximately 3 to 4 hours.
6. A method for augmenting the release of growth hormone in humans by the ingestion of the component 1 and the component 2 for the treatment of conditions and disorders selected from the group consisting of aging decline in GH release, obesity, insufficient GH release in the case of pathology and surgery, emergency

needs for prolonged awakesness and physical strength, augmenting the function of the hypothalamus, augmenting the energy production system, augmenting the immune system, augmenting the neurological system, augmenting the general anabolic conditioning of the body, improvement in the circadian rhythm entraining system, exercise related GH release, and premenopausal estrogen spike driven GH release in women.

7. The method claim 6, wherein appropriate pharmacological dose of the component 1 is 500 milligrams and the component 2 dose is 20 to 50 milligrams administered within 1 hour of night time sleep.
8. The method in claim 6, wherein appropriate pharmacological dose of the component 1 is 500 milligrams and the component 2 dose is 20 to 50 milligrams administered 1 hour before extremely vigorous exercise and 1 hour before the large pulatile estrogen release of premenopausal women.
9. A method for augmenting the growth of immature domestic animals by oral ingestion administration of the component 1 and the component 2 within one hour of night time sleep.
10. The method claim 8, wherein the appropriate pharmacological dose of the component 1 is the product of multiplying 8 milligrams by the numerical value of the animal weight in kilograms and the component 2 dose is a range of 1 to 4 milligrams multiplied by the numerical weight of the animal in kilograms.